

ACC Plant cycle

DIRECT DRY COOLING SYSTEM

Hexacool® is a standardised, modular air cooled condenser (ACC) which is easy to build and robust in performance. This product is well-suited for small power plants that range from a few megawatts to 50 megawatts. ACCs directly condense the steam turbine exhaust flow and return condensate to the boiler without water loss.

Typical Hexacool applications include waste to energy plants, biomass power plants, geothermal power plants, small sized electrical power plants and industrial/process plants, where Hexacool® is a more cost effective solution than the traditional A-Frame ACC.

THE FEATURES OF HEXACOOOL®



Single-Row Condenser tubes (SRC®)

The heat exchanger's finned tubes, the core technology of the air cooled condenser, is the Single Row Condenser (SRC®) tube – an elongated aluminium clad carbon steel at the tube with brazed aluminium fins.

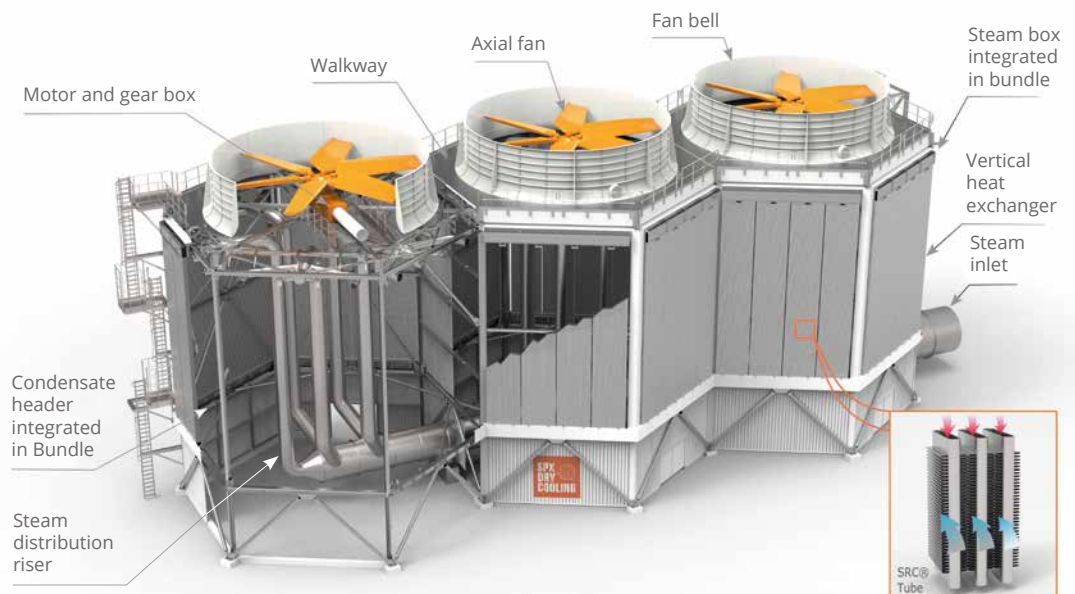
The excellent corrosion and freeze resistant SRC® finned tubes are manufactured in SPG Dry Cooling's fully owned state of the art factories.

Finned tubes are arranged vertically on the sides of the Hexacool®, where both primary and secondary finned tube zones are provided to ensure good, non-condensable gas extraction to the air evacuation unit.

Airflow is delivered by induced draft axial fans and driven by electric motors and gearboxes that are installed above the heat exchangers. Hexacool® is available with a fan size of 32ft to 40ft.

The typical scope for an ACC installation includes the heat exchangers, the fan motor groups, the supporting structure, the steam ducting from the steam turbine interface and auxiliaries such as the condensate and drain pumps, condensate tank, the air evacuation units, and related piping works. In addition, there are electrical and instrumentation elements – (see below).

SPG Dry Cooling has extensive experience in designing, manufacturing, delivering and constructing ACC's all over the world.



Hexacool® ACC overview

THE MAJOR BENEFITS OF HEXACOOOL®



Long-term mechanical and thermal integrity	A lighter structure with reduced foundation loads	A cost-effective solution for a high quality product	Low auxiliary power	Low noise design achievable
Easier and faster to build in the field	Excellent corrosion and freeze resistance	Compact, simplified design with a greater degree of prefabrication at the workshop	Unit designed for easy access and easier cleaning and maintenance	Decreased wind sensitivity which improves performance during windy conditions
Total height is lower than an A-frame design which provides easy integration into urban environments	Induced draft concept reduces risk of hot air recirculation for higher plant efficiency in all operating conditions		More uniform steam distribution than multi-row heat exchangers and total absence of back flow of steam, resulting in better performance and avoiding air accumulation, flooding, sub-cooling and freezing	

More information about our patents:
<https://spgdrycooling.com/ip-legal/patents/>

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